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# Assurance of Learning in Contract Management Education

*How the establishment of learning goals and objectives, alignment of curricula, and identification of assessment instruments and measures can be applied in the context of a contract management-related degree program to determine the effectiveness of the education program and to improve student learning.*

BY RENE G. RENDON

Organizations today, both private and public, are focused on increasing accountability and continuous improvement in their operational processes. This focus is especially evident in higher education institutions—specifically colleges and universities within the United States. Educational accrediting bodies, both regional and professional, are mandating that accountability and continuous improvement initiatives be incorporated in university degree curricula. One method for implementing these initiatives in educational institutions is through the implementation of assurance of learning assessments.

## Importance of Contract Management Education

The contract management function is increasing in importance in both the private and public sector. The private sector has recognized the important relationship between a company's contracting process and its financial position and bottom line. The profit-potential of the contracting and procurement function has earned a strategic role in many leading-edge organizations.<sup>1</sup> In addition, contract management has become a core competency for public agencies. Government organizations have transformed from traditional hierarchical bureaucracies to complex networks characterized by public managers managing public-private partnerships and

mission-critical contracts.<sup>2</sup> Negotiations, risk analysis, and contract management are considered some of the main elements of this new public management environment.<sup>3</sup> In this article, *contract management* is defined as the art and science of managing contractual agreements throughout the contracting process. The *contracting process* includes pre-award activities (procurement planning, solicitation planning, solicitation, and source selection) and post-award activities (contract administration and contract closeout).<sup>4</sup>

Although contract management continues to be a critical aspect of the U.S. federal government's mission, the government has not been successful in managing its contracts for supplies and services. The Government Accountability Office (GAO) continues to list contract management as a high risk area, citing poor acquisition outcomes and missed opportunities to improve its approach to buying supplies and services.<sup>5</sup> GAO also lists human capital management as a

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high-risk area because of the government's longstanding lack of a consistent approach to human capital management and a continuing need for a governmentwide framework to advance human capital reform.<sup>6</sup> This human capital reform directly affects the federal government acquisition and contract management workforce.<sup>7</sup>

With contract management considered to be a core competency for both private and public sector organizations,<sup>8</sup> today's managers must have the appropriate education and skills necessary to manage these complex and critical contracts. These skills include negotiations, project management, and contract management.<sup>9</sup> The government requires contract management education and training for its acquisition and contracting workforce.<sup>10</sup> During fiscal year 2009, federal contracting obligations accounted for over \$534 billion in supplies and services.<sup>11</sup> Federal government acquisition professionals are responsible for managing contracts for the procurement of critical supplies and services, ranging from commercial-type supplies, professional and administrative services, and highly complex information technology systems.

The critical role of the contracting function in both private and public sectors also places increased emphasis on the education of future contract management professionals. Many higher education institutions are now providing curricula with content, courses, and even degree programs related to contracting and procurement. However, there is also a need for these institutions to assure that the learning outcomes in these academic programs are being met, thus ensuring that their graduates are acquiring the knowledge and skills needed to be successful in the contract management workplace. This will be further discussed in the next section.

### Assurance of Learning in Higher Education

Institutions of higher learning are focusing on accountability and performance outcomes in their operational processes. One specific area of focus is academic curricula and teaching methods.<sup>12</sup> Recently, colleges and universities, specifically schools of business, have been criticized for "failing to impart useful skills, failing to prepare leaders, failing to instill norms of ethical behavior—and even failing to lead graduates to good corporate jobs."<sup>13</sup> Further criticism of U.S. business schools include "diverting resources from investment in knowledge creation...to short-term strategies aimed at improved rankings, such as placement offices and public relations campaigns."<sup>14</sup> In response to such criticisms, and as required by accrediting agencies, schools are now conducting assurance of learning assessments to determine the effective-

ness of their educational programs. In this article, *assessment* is defined as "the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development."<sup>15</sup> The purpose of the assessment is to determine whether educational programs are contributing to student growth and development.<sup>16</sup>

Regional accrediting agencies, such as the Western Association of Schools and Colleges (WASC), and professional accrediting bodies, such as the National Association of Schools of Public Affairs and Administration (NASPAA), and AACSB International (The Association to Advance Collegiate Schools of Business) each require some level of assessment of learning outcomes.

The WASC discusses *learning outcomes* as "the anticipated or achieved results of courses or programs or the accomplishment of institutional objectives, as demonstrated by such indicators as student attitudes, knowledge, skills, and performance."<sup>17</sup> In terms of assessing student learning outcomes, the WASC describes *summative assessments* as:

[An] assessment of student learning that is conducted at the culmination of the student's studies and provides evidence of the student's learning for an entire course of study. Applied organizationally, it refers to methods used to evaluate the overall effectiveness of a program, an institution, or some element of the course of study.<sup>18</sup>

NASPAA is the accrediting association of graduate programs in public administration, public policy, and public affairs. NASPAA's mission is to ensure excellence in education and training for public service and to promote the ideal of public service.<sup>19</sup> NASPAA's proposed 2009 accreditation standards identifies "established observable program goals, objectives, and outcomes, including expectations for student learning," as part of its performance expectations standard.<sup>20</sup>

The AACSB International is considered the premier professional accrediting agency for business schools. The AACSB accreditation requirements also include specific assurance of learning standards for its accredited business schools. The AACSB assurance of learning standards emphasize direct assessment of student learning, as opposed to indirect assessment measures such as graduating student surveys, alumni surveys, and employer feedback. The AACSB requires its accredited schools to "formulate specific learning goals and conduct appropriate direct assessments of learning for purposes of improving curricula when deficiencies or

opportunities for improvement are found.”<sup>21</sup> The AACSB describes the assurance of learning assessment process as consisting of five steps, which will be discussed further in the next section.

## The Assurance of Learning Assessment Process

The AACSB describes the assurance of learning assessment process as consisting of five steps:

1. Establish learning goals and objectives;
2. Align curricula with learning goals;
3. Identification of assessment instruments and measures;
4. Collection, analyzing, and disseminating of assessment information; and
5. Using the assessment information for continuous improvement.<sup>22</sup>

These steps are discussed in more detail below. Since the contract management body of knowledge is typically embedded in courses that are part of business administration or management-related degrees, this will be the context for the discussion. The contextual framework used here is a business administration degree that includes contract management–related courses or even a specialization in contract management. It should be noted that the process discussed below is equally applicable to a public administration degree that includes contract management–related courses or even a specialization in contract management.

### *Establish Learning Goals and Objectives*

Academic learning goals reflect the mission of the school or the degree program. These learning goals are broad statements that reflect the goals in terms of general knowledge and skills areas, as well as management-specific knowledge and skills areas. General knowledge and skill areas would include skills such as communication, problem-solving, and ethical reasoning. Management-specific skill areas would include financial management, operations and supply chain, economics, acquisition program management, and contract management.

The assurance of learning process requires that learning goals be developed to reflect what the school’s graduates will accomplish or to reflect the characteristics gained from the

program. These learning goals should be developed to reflect the major emphasis of the core business courses, as well as the contract management–related courses. Below are examples of learning goals for the core business courses:

- Students are well grounded in the fundamentals of accounting, economics, finance, organizational management, statistics, and operations management as they apply to the business environment;
- Students are able to think in a critical, analytic, integrative, and ultimately a strategic manner;
- Students are capable of solving both structured and unstructured problems by using the various tools mastered in both core business courses and contract management courses; and
- Students are able to conduct independent research and analysis of a business-related problem and effectively present results in both written and verbal forms.

In addition to the above learning goals for the core business courses, learning goals should also be developed for the contract management courses. Below is an example of a contract management–specific learning goal:

- Students are knowledgeable in the policies that govern and the concepts, processes, and tools that enable the successful contract management for the acquisition of effective and suitable systems and services that satisfy user requirements.

Since the learning goals are broad statements, they must be translated into one or more learning objectives. These objectives describe a measurable attribute of the overall learning goal. Thus, the learning objectives reflect what students will be able to accomplish, indicating that they have met the learning goal. It would be appropriate for each learning goal to have multiple learning objectives. Below are examples of learning objectives related to the contract management–specific learning goal:

- Objective 1: Students will be knowledgeable in the management of pre-award, award, and post-award contract management activities necessary to acquire cost-effective, mission-critical services such as base operations support, information technology, and weapon system support;
- Objective 2: Students will be knowledgeable of major principles of government procurement and fiscal law, as well as ethics law, governing formation, and administration of government contracts; and

- Objective 3: Students will be knowledgeable of major principles of cost and price analysis, as well as profit analysis and contract negotiations in pre-award, award, and post-award contract management activities.

### *Align Curricula with Learning Goals*

This step involves ensuring the academic curricula reflect the associated learning goals. The courses within the curricula should include coursework that supports achievement of the learning goals. Using our example of the learning goals of achieving knowledge and skills areas such as communication, problem-solving, and ethical reasoning, it would be expected that courses within the curriculum include learning modules, lessons, and course requirements that support learning these skill areas, such as writing research papers, analyzing business cases, and discussing business scenarios involving ethical decisions. Additionally, using our example of the learning goal of achieving knowledge and skills in contract management, it would be expected that courses within the curriculum include learning modules, lessons, and course requirements that support learning these skill areas, such as services contracting, contract law, and price and cost analysis.

### *Identification of Assessment Instruments and Measures*

The next step in the assurance of learning process involves the selection of the specific events or activities that will be used for assessing the student's achievement of the learning objectives. This typically involves selecting specific assignments, such as a written research paper, business case analysis, or case presentation, that are embedded in the course syllabus to be used in assessing learning outcomes. The selected assessment event will identify the traits or measures that will reflect the observable evidence showing accomplishments of the learning objectives. Thus, in addition to being evaluated as part of the grade for that specific course, these specific assignments are also used as the assessment instrument and as a measure for the associated learning objective. The following is an example of an assessment event for the contract management learning objective:

- *Assessment Event:* In the services contracting course, students will be provided a complex services acquisition scenario requiring them to conduct a critical analysis of the services acquisition contract and address areas such as service requirements definition, business arrangement and contract type, performance-based attributes, and contractor performance surveillance.

Along with the assessment event, an assessment measure or rubric must be developed to support the achievement of the learning objective. The following is an example of an assessment rubric for the above assessment event:

- *Assessment Rubric:* As required by the services contracting course syllabus, students will be assigned a services acquisition contracting case for analysis. Students will be required to write a 10-page "Services Contract Analysis Report" on the assigned case. Students will be required to demonstrate knowledge in contract management concepts, processes, and tools by identifying and addressing issues related to the services contract management processes of procurement planning, solicitation planning, solicitation, source selection, contract administration, and contract closeout. These issues should include specific aspects of service requirements definition (development of statements of work or performance work statements), business arrangement (contract type and incentive/award fee), performance-based attributes, and contractor performance surveillance (development and administration of quality assurance plan). The assessment event will be graded as follows:
  - 90–100% (Very Good): The student identifies all major issues and provides a thorough analysis of the services contract management process.
  - 80–89% (Good/Satisfactory): The student identifies most of the major issues and provides sufficient analysis of the services contract management process.
  - 79% or below (Poor/Unsatisfactory): The student does not identify any of the major issues, or provides an insufficient analysis of the services contract management process.

An example of the assessment measure would be "85 percent of graduating students will be evaluated as 'Good/Satisfactory' on the case analysis assignment in the services contracting course." The student's achievements of these measures will determine if any interventions must be initiated to address identified deficiencies.

### *Collection, Analyzing, and Disseminating of Assessment Information*

Once the learning goals, learning objectives, and the curricula are all aligned, and the assessment instrument and measures are identified, the next step in the assessment process is to collect and analyze the learning outcome data. Some issues

to consider in this step include the forum and the frequency of the learning outcomes assessment. The AACSB recommends a standing faculty committee for the evaluation of the assessment results. In addition, it is recommended that a systematic collection process be implemented that crosses AACSB review cycles. Of critical importance in this step is the assessment of the learning outcome data in a way that meets the AACSB's spirit and intent of continuous improvement.

### *Using the Assessment Information for Continuous Improvement*

The purpose of the learning outcome assessment process is to determine the effectiveness of the school's educational programs and to improve student learning. The final step in the assessment process is to actually use the information resulting from the learning assessment to continuously improve the curricula and, ultimately, student learning. Depending on the results of the learning assessments, revisions or modifications to teaching methods, course material, or course assignments may be incorporated into the curricula to improve the effectiveness of the educational programs and student learning.

In addition to the "assurance of learning" process discussed above, colleges and universities may also employ other tools that support assessing student learning. These will be discussed in the next section.

### **Other Learning Assessment Tools**

Assessment of student learning is not limited to the formal "assurance of learning" process described in this article. Some colleges and universities also use end-of-course student surveys for obtaining feedback on various elements of the course, as well as the instructor. These course feedback surveys are administered after every academic term for every course completed by the student. Anonymity is maintained in the survey process to promote objective and unbiased feedback. The completed surveys are then used by the instructor to make any needed revisions to the course structure or teaching materials. Additionally, the surveys may be used by the institution to monitor faculty teaching effectiveness.

In addition to the end-of-course surveys, some colleges and universities are also conducting end-of-program surveys with each of the graduating students. These "exit surveys" are Web-based surveys sent to students at the end of the final academic term prior to graduation. These surveys are similar to the end-of-course surveys, but focus more on the entire

curriculum, as opposed to just one specific course. Just as in the end-of-course surveys, the exit surveys maintain anonymity and are used to make any needed revisions to the curriculum structure or teaching materials, as well as to monitor faculty teaching effectiveness.

Another learning assessment tool includes the use of academic curriculum reviews. Many colleges and universities have established program advisory boards to inform curricula design and ensure courses are relevant to industry or employer needs. These advisory boards are made up of business, industry, and government leaders, as well as other subject matter experts, who provide input, feedback, and guidance on specific degree program curricula. These advisory boards may also include employers of the school's graduates, and thus are able to identify desirable skills sought for its graduates, and provide feedback on how adequately recently hired graduates are prepared for employment in the field. For example, a university with a contract management-related degree program may establish an advisory council that includes industry and government representatives, in addition to government contractors who typically employ the program's graduates. This advisory board may be asked by the university to review the curriculum, recommend revisions as appropriate, and validate the curriculum components (learning outcomes, courses, projects, etc.). The curriculum review serves to meet the overall need for continuous improvement of the curriculum and its content, as informed by the curriculum stakeholders. Thus, learning outcomes, which form the basis for the curriculum, are continually reviewed by the program advisory board.

### **Other Potential Learning Assessment Considerations**

Workplace-focused learning assessment methods may also be appropriate and effective for the contract management field. There are various approaches for assessing whether educational institutions are adequately preparing students for the workplace.<sup>23</sup> Some of these approaches include obtaining feedback from alumni and employers, as well as other workplace feedback approaches. These approaches can be easily applied to contract management-related degree graduates. Many college and university academic departments, as well as alumni associations, maintain contact with their graduates, as well as their graduates' employers. These schools leverage these connections to obtain feedback on the adequacy of the degree program in terms of preparing students for the workplace.



Another indicator of learning assessment, specifically for contract management degree graduates who enter the contracting career field, would be an analysis of the number of graduates who went on to be designated warranted contracting officers for their respective government agencies or contract managers for their companies. Warranted contracting officers are specifically designated government officials who have been authorized by the U.S. government to act on its behalf in contractual matters. Warranted contracting officers have authority to enter into, administer, or terminate contracts and make related determinations and findings.<sup>24</sup> The *Federal Acquisition Regulation* states, “in selecting contracting officers, the appointing official shall consider the complexity and dollar value of the acquisitions to be assigned and the candidate’s experience, training, education, business acumen, judgment, character, and reputation.” The regulation goes on to specify selection criteria to include “education or special training in business administration, law, accounting, engineering, or related fields; knowledge of acquisition policies and procedures, and specialized knowledge in the particular assigned field of contracting.”<sup>25</sup>

Finally, other learning assessment approaches could include identifying contract management graduates who have successfully earned industry based professional certifications, such as the Certified Professional Contracts Manager (CPCM), Certified Federal Contracts Manager (CFCM), or Certified Commercial Contracts Manager (CCCM) conferred by the National Contract Management Association. These professional certifications require, in addition to meeting specific educational and experience requirements, successfully passing rigorous examinations covering the major competencies of the contract management body of knowledge. A contract management degree graduate’s success in passing a professional contracting certification exam may be considered a positive indicator of the student’s learning assessment in that degree program.

## Recommendations for Implementing Assurance of Learning

The assurance of learning initiative in higher education is still in its infancy stage, as many colleges and universities grapple with the challenges of assessing student learning. This will continue as accrediting agencies, and even government agencies, begin to hold higher education institutions responsible for achieving student learning outcomes. The following recommendations for implementing assurance of learning assessments are provided.

### *Keep Focused on the School’s Mission*

The assurance of learning assessment should reflect the mission of the school. Just as the curricula reflects the school’s mission, the assurance of learning goals, objectives, and assessments should also reflect the university’s purpose and expectations of its graduates once they return to the workforce. Schools that are currently challenged with formulating and agreeing on their mission statement will find implementing the assurance of learning process problematic.

### *Communication is Key*

A successful assurance of learning program requires communication and collaboration among all faculty in the school. The assurance of learning process should permeate throughout the various school curricula as well as throughout the levels of faculty, including non-tenure track, tenure-track, and tenured professors. The school’s leadership will need an effective means of communicating with all faculty and garnering support from the faculty. Schools that are challenged with communicating to its faculty and garnering support will face a daunting task in implementing an assurance of learning program.

### *Integration is Essential*

As previously stated, assurance of learning programs cut across the school’s various curricula. Assessment events and related rubrics embedded in different business core courses, for example, as well as contract management-related courses, could be used in the school’s learning assessment process. Schools that have successfully integrated their courses, both core and concentration, into cohesive curricula will reap these benefits as they implement an assurance of learning program.

### *Leadership Support is Critical*

Just as in any other higher education endeavor, the support from the school’s leadership is a critical success factor. This includes support from the dean, associate deans, and senior faculty. If the school is experiencing a leadership vacuum, this will be reflected in the effectiveness of the assurance of learning program.

## Conclusion

The contract management function is increasing in importance in both the private and public sector. Because of this increased importance, today’s contract managers must have

the appropriate education and skills necessary to manage their organization's complex and critical contracts. Although many higher education institutions are now providing contract management-related curricula, there is also a need for these institutions to assure the learning outcomes in these academic programs are being met. This article discussed how the assurance of learning process can be applied in the context of a contract management-related degree program for institutions to ensure that their graduates are acquiring the knowledge and skills needed to be successful in the contract management workplace.

This article also presented the importance of the institution's mission focus, communication, integration, and leadership support in implementing the assurance of learning process. *JCM*

## ENDNOTES

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